the CANNON University of Toronto Engineering Society Vol. VI, No. 6 Test Your Skule Knowledge Coast to Coast Engineering Ideas Why Doesn't the CN Tower Shake?



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the CANNON

Vol. VI, No. 6

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THE CANNON is a publication of the University of Toronto Engineering Society. It is published monthly to announce Eng Soc events, discuss faculty and university matters, and present technical information of interest to Engineering undergraduates. Subscriptions are available, call Elia at 978—2917. Anyone interested in helping with THE CANNON is most welcome.

THE CANNON encourages submissions; please type or write legibly. Deadline for articles and letters for the next issue is Tuesday, February 28. Comments on THE CANNON or articles appearing in it are appreciated. The editor reserves the right to edit for brevity.

ISSN 0711-4370

A Fantastic Team

For the first time, the Royal Canadian Institute and our own Engineering Society have combined their efforts resulting in a joint meeting. Dr. Donald Allen, a vibration control specialist, will present a special lecture on the dampers used to control the oscillators of the CN Tower.

page 5

A Meeting of Minds (and High Spirits)

Last month at the University of Western Ontario, delegates from engineering societies across Canada met at the Congress of Canadian Engineering Students. They discussed academic, social and sporting issues that affect all engineering schools. Read about their big plans.

Centennial Countdown

The debut of a new series of quizzes on the history of our Engineering Society. page 10

On the Cover

Stalwart Godiva supporters invade Front Campus.



In Every Issue

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Editor's Comments

As a representative of the media, I receive briefings, mail (junk and otherwise), notices and the occasional invitation to significant events related to our Faculty. In response to such an invitation, I recently attended the opening of an important engineering exhibit. The experience involved much more than my editorial 'perk' and is deserving of attention.

The exhibit mentioned above is entitled "A Celebration of Engineering — The Brooklyn Bridge" and is on display in Toronto at College Park (corner of College and Yonge) until February 13. The collection of drawings, photos, models and other memoribilia of the bridge is a travelling exhibition with a permanent base National Smithsonian's Museum in Washington, D.C. The items were compiled in

honour of the centennial of this structure in 1983.

Enough history, why should an engineering student in this very different technological era be attracted to the display? Above and beyond the fact that our Engineering Society will also be celebrating its centennial in just one year, many of the engineering principles and lessons of the Brooklyn Bridge are still applicable today.

The suspension system used in constructing the bridge is still the chosen method for building bridges of any appreciable length. Also, some of the specific techniques developed due to the bridge's strenous demands remain popular.

However, not only Civil students should be interested in this exhibit because it includes much more than technical details. The perserverance of the three principal characters,

John, Washington and Emily Roebling, is admirable — the bridge project lasted 16 years from proposal to completion, four times the time commitment we make to learning 'all about' engineering at Skule. Many fields are currently expanding at a phenomenal rate with each project attempting to achieve sophistication. greater pioneers and innovators face criticism along with technical challenges just the Roeblings did one hundred years ago.

Though none of us are currently capable of supervising a project of the magnitude of the Brooklyn Bridge, the possibility of doing so in the future is inspiring. The fact that this huge task was completed obviously had a great effect on this media representative and I feel that you owe yourself this experien-

ce as a student.

SKULE NITE 8T4

Tickets available in SFB740 starting on:

Friday, February 10 8-9 am & 12-2 pm

Prices range from \$3.50-\$5.00

Performances will be held March 7-10 in Hart House Theatre

* * * * * * * * * *

Centennial Design Committee Meeting

Mon., Feb. 6 at 5 pm

Centennial Committee Meeting

Mon., Feb. 20 at 5 pm

Both meetings will be held in the Metallurgy Common Room (WB143)

CN Tower Expert Speaks

Engineering Great Heights

Professor Emeritus L.E. Jones Honorary Secretary Royal Canadian Institute

Engineering students at the of Toronto University familiar enough with the adjacent buildings respectively named in honour of Sandford Fleming (1827-1915) and John Galbraith (1846-1914) but, by and large, undergraduates are not so well aware of the profound contributions which each of these men made to the development of engineering in Canada. In his multiple skills, Fleming personified the science and art of engineering. To name just three of his broad accomplishments, chief engineer (simultaneously) three railways spanning most of Canada, designer and printing engraver for Canada's first postage stamp and originator of the comcept of 'standard time'. Galbraith was the versatile authority in engineering projects large and small, an attribute bequeathed to countless men and women who have benefitted from his dedicated leadership in engineering education. He was the first Professor in the Ontario School of Practical Science. later its Principal, and then Dean when S.P.S. became fully integrated with the University of Toronto as the Faculty of Applied Science and Engineering. February 25, engineering students of today will have an unprecedented opportunity to perceive how the labours of these two men have come together in terms of a modern-day engineering marvel.

Galbraith was a co-founder, in 1885, of the University of Toronto Engineering Society, which next year will celebrate very proudly its centennial as Canada's oldest engineering organization. Fleming was a cofounder, in 1849, of the Royal Canadian Institute, which is Canada's oldest scientific organization. John Galbraith was an officer thereof during the periods 1880-1882 and 1906-1909. Since 1850, the Institute has held an unbroken series of weekly meetings, on Saturday or Sunday during the season, to promote "the purposes of science and the general interests of society".

It was at one of these meetings, in 1879, that Sandford Fleming first gave public presentation of his ideas on 'world time-reckoning' and the Institute was the first scientific body to sponsor them. The long tradition of the Institute is to present scientific material in a manner fully understandable appreciated by a lay audience, thus to fulfil the obligation to serve "the general interests of society". I am proud to have presented three different subjects to the Royal Canadian Institute (in 1961, 1967 and 1970), but prouder still to have initiated the following:

Joint Meeting
Royal Canadian Institute
U of T Engineering Society
Convocation Hall
Sat. evening, February 25
Doors open: 7:30
Music by engineers:7:45-8:15
Lecture: 8:15

Keeping the CN Tower from Shaking (illustrated with colour slides)

Donald L. Allen, B.SC., B.Eng., Mechanical Engineering, U. of T. President, Vobron Limited.

In addition to imposing discomfort and danger on living creatures, wind action may induce oscillations which can be extremely hazardous to air- and

sea-craft and to land-based structures - particularly tall, slender ones such as the CN Tower. Its maximum natural vibration, side to side, would be approximately 16 feet, and this tendentcy must be cancelled out by means of suitable 'shock absorbers' - automatically and immune to any power failure (which, often enough, is caused by severe wind effects). Dr. Allen will describe and illustrate the work of his engineering firm in the design, fabrication, installation and operation of the 'tuned-mass dampers' used on the world's tallest fre-standing structure. The completion schedule for this pioneering job was incredibly demanding and involved 'shopping' out of the country for components not otherwise available in time. Some of the assembly was still going on in the truck making the delivery to the site! During some of the real-life testing, the tower was set in oscillation, to about 3 feet in total amplitude, by an intrepid engineer standing on the top of the tower and jiggling appropriately from one foot to another.

Donald Allen, a superb engineer and a superb speaker is one of us and the unique CN Tower is part of our neighbourhood, just a few blocks away. You will never have a better opportunity to achieve true engineering awareness combined with thorough enjoyment and professional pride. Educate and entertain a companion whether engineer or not; come in informal garb, if you wish; enpre-lecture music provided by fellow engineers: The Skule Brass Trio, Cliff Alexander, Kent Fletcher and Danny Gargaro (all 8T5), and at the organ, Malcolm McGrath (5T4), Assistant to the Dean -Alumni Liaison.

Magazines, Competitions and Campaigns Discussed

Eng. Students Make Plans

Do you know what 16th CCES stands for? For those who don't, including Dave Stubbings, Chairman of the 17th CCES, it for the sixteenth stands of Canadian Congress Engineering Students. Each year the conference is held so that engineering students from across Canada can meet to discuss new ideas, learn more the engineering profession and have a good time. This year it was hosted by the University of Western Ontario. Over 120 delegates from 29 schools across Canada attended the five day event. Representing U of T were Barry Levine, Amit Choudhury, Greg Dow, Chris Harris, Dave Stubbings and myself. As U of T will be hosting the conference next year, we attended with the added responsibility of learning the details of how to organize such an event.

After settling in to London on Wednesday, we got down to business on Thursday, January 5. Since the theme of the conference was "Computers and Modern The Revolution", the morning consisted of speakers alluding to this topic. In the afternoon, John Evans, the President of the Canadian Council of Professional Engineers spoke on "Engineering for Tomorrow". He stated that new advances in technology may have a negative impact on employment but we must learn to solve these problems and adapt to new situations. If we properly apply ourselves. adapt to changing environment there will be challenges for all of us. Also, as future engineers, we should seek out ways to contribute to our community and our nation and ensure that the public is better informed of engineering achievements. Also scheduled for the afternoon were five workshops — Project Magazine, CEDC, School Apathy, Sports in Engineering and Underfunding the latter being presented by Barry Levine. The details of the discussions that occurred at these workshops can be found below.

On Friday, all of the delegates toured the University of Western Ontario Boundary Layer Wind Tunnel. At a cost of 3.5 million dollars, the new closed-circuit tunnel occupies 1,170 square metres and has high-speed and low-speed working sections connected in parallel. Later in the day, the student papers were delegation presented. Our presented 3 of the 11 papers. Barry Levine presented a paper entitled 'Underfunding at U of T'. Greg Dow presented a paper outlining the computer facilities in our Faculty and how they were obtained. Chris Harris and gave a presentation on the design of the Sandford Flemina Building.

Saturday morning featured the important plenary session. At this time, a number of motions were presented to the congress. One of the more important motions proposed and passed was for the initiation next year of a national unengineering dergraduate magazine to be called Project Magazine. Another important motion passed was for the creation of 4 regional competitions similar to the present OEDC with the winners advancing to a national competition. In the afternoon, we attended a panel discussion with the theme Social Impact of Computers and Robotics'. Dr. R.J. Roberts discussed the inadequacies of Canadian laws in preventing computer piracy while John Clarke from the union of unemployed workers discussed how new technology is forcing thousands of workers to be laid off with a bleak future for reemployment. The formalities of the conference were concluded that evening at the final Banquet.

Mention should be made of Dave Stubbings attempt to be a fireman, the great copper penny caper and the assault of the vaseline commandos. For an explanation of the above, ask Barry Levine.

James Makaruk Chem 8T6

Country-Wide Magazine

Over the past two years considerable time and effort has been spent to determine the feasibility of a magazine for undergraduate engineering students across Canada.

The publication will have a magazine format similar to Maclean's and be composed of various submissions; one page from each of the engineering societies across Canada. The issue, scheduled November 1984, will be an introductory including issue general descriptions academic and extra-curricular activities. Subsequent issues will be based on a central theme, such as the value of environmental protection, with each submission representing the views of the respective group of engineering students. In order to prevent any hostility between the magazine and the schools' administrative staff, each submission must be approved by the respective Dean of Engineering. It is important to note that the Dean will only have veto power, not editorial power. Should the regional editor feel

that the Dean is being too restrictive, an application can be made to the General Manager who will act as an ombudsman. While Project Magazine is being organized by Queen's engineering students, the magazine will in no way reflect any bias towards or against any engineering school.

Project Magazine will be published in English and French. Producing the magazine as a dual language publication should broaden its appeal. The second issue of the magazine is to be published in March 1985 and on a semi-annual basis thereafter. Once the magazine is operational, the publication schedule may be open to review.

The intent of the magazine is to unite engineering students despite intercollegiate rivalry and enable them to discuss openly issues of concern and interest. It is hoped that the magazine will impart to each student a sense of professional responsibility as a member of engineering Canadian the community. By communicating directly with all engineering students, Project Magazine becomes an ideal medium for professional organizations such as the Canadian Council of Professional Engineers to address all Canadian engineering students.

Initial funds for the first issue of Project Magazine will be primarily be raised from the offering of patronages and sponsorships to large Canadian corporations. A list of patrons will be published in each issue of magazine. While patronage will not offer the donor any editorial privileges, it will serve as an indicator to all engineering students of the company's concern for, and interest in, the engineers of tomorrow. Further financing for the initial and subsequent issues will be raised from advertising revenues. Patrons and advisors will be approached at the national level by the magazine's executive committee.

Engineering students across Canada will be asked to support

Project Magazine with a donation of forty cents per student each year. Should advertising and subscription revenues reach the stage at which Project Magazine is self-financing, this pledge will be discontinued.

We have here the opportunity to furnish the Canadian engineering student community with a magazine aimed directly at their interests. All we need is the support of engineering students, patrons and advisors.

> Amit Choudhury Elec 8T6

Sports in Engineering

One of the workshop topics at year's Congress this Canadian Engineering Students was that of sports in engineering. Ways of promoting inter-university petitions among engineering students and events that would link all engineering students across Canada were discussed.

Many competitions already exist in Southern Ontario for engineering students. The U of T Engineering Athletic Association sponsors trips for our basketball, rugby and many other teams to competitions across the province. Usually it only requires a weekend of the student's time plus his or her commitment to play on a team. To get involved in engineering teams you should talk to Glyn Jones, Men's Athletic Director or Betty Dolinar, Women's Athletic Director or leave a note in the respective mailbox in the Eng Soc. Teams are formed for all levels of competition and skill.

A method of linking all the engineering schools across Canada was also discussed at the conference. One idea that was suggested was that of a cross-country car rally. To do this each Engineering Society would take a turn driving the car to the next university. The proceeds of the rally would be

given to charity, possibly the Cancer Society. Paul Chislholm of the Technical University of Nova Scotia is going to examine the logistics of having a car rally over the next year. If anyone is interested in helping Paul please drop a note in the CCES '85 mailbox.

David Stubbings Mech 8T6

Engineering Underfunding

One of the more prominent issues at this year's Congress of Canadian Engineering Students was underfunding. Besides presenting a paper on U of T's underfunding situation, I ran a workshop on the issue. The idea was to find out how the problems varied from school to school, and what, if any, measures were being taken to combat the problems.

All of the schools felt that there were difficulties with the fund distribution schemes used by their provincial governments. provincial governments The grant funds to the universities, which in turn divide funds among the various departments. Hence, some engineering faculties receive more money other engineering than do faculties. This often depends on the size of the school and the percentage of engineering example. students. For engineering represents 40% of the school's population, the faculty is likely in a better position than a school where engineering represents 19%. After all, there are some costs that will be incurred regardless of whether there are 10 students or 3000. As expected, most schools indicated that the equipment budgets had been hardest hit by underfunding.

More important than the problems themselves were

continued on page 8

CCES Workshops continued from page 7

some actions taken to combat the difficulties. Several schools, particularly Western universities, had managed to get some additional funds through private industry. Others had set up capital improvement funds or the like.

UBC expects their tuition to rise by 35% within a year or two. Concordia is working on a capital improvement campaign to raise \$25 million. Although Waterloo has a small alumni, they are conducting a phoneathon and working on a \$19 million fund. The University of Saskatchewan has an equipment advancement fund - fourth year students are asked to make a pledge covering the next 5-10 years, before they leave the school.

Generally, it was felt that where industry funds could not be secured, it was most important to educate alumni, as they are the leaders of industry. This can best be accomplished while students are still at the school. Some other ideas that came out of the workshop were: a letter writing campaign to 4th year students, a letter writing campaign to parents (who may not be alumni but may be in a position to donate), and the suggestion that faculties should employ a full-time staff member to solicit research contracts and industry donations.

The final purpose of the workshop was to prepare some type of action by the Congress behalf of engineering students across Canada. Seeing that the Congress meets only annually, the scope of action is greatly limited. It was felt that a letter writing Campaign could easily be employed. Basically, we wanted to make everyone aware of the underproblems funding strongly urge everyone to help solve the problems. Hence, letters will be sent to the federal and provincial governments, the

Canadian Dean's Association, the Presidents, Vice-Presidents and Chancellors of the universities, the Canadian Accreditation Board, and the various provincial professional associations. It is the aim of this letter to get all parties to work together in solving this problem.

Barry Levine Ind 8T4

Student Apathy Problems

Apathy. Do you give a damn? Many students don't, and this is a growing concern according to engineering societies from across Canada. At the Congress of Canadian Engineering Students, this subject, apathy, was the topic of discussion at one of the workshops.

The suspected origins of apathy were discussed, such as competition for high marks, large student enrollment (decreasing school spirit), and the social divide between Canadian and foreign students.

Successful methods for combating apathy were discussed, here is a summary:

- The system of big brothers and big sisters. Each frosh is assigned an upper classman for the year, who helps the frosh get used to his or her new environment. The big brother/big sister answers any questions the frosh may have, and tries to get the first year student involved in the school.
- An alternative to the above system is assigning a big brother or big sister to a 1st year class. The big brother/big sister comes in once a week to get frosh out to events, answer any questions, and be a guiding light in the first foggy year of university.
- Having classes pick names they wish to be represented by. Instead of being called "Frosh Class G", a class chooses a name like, "The Bombers", "B-Bop Delights", etc. At all school activities, classes are awarded points for turn-out which are

recorded on a board. The most active class gets an award at the end of the year.

- Getting foreign student groups involved. Co-ordinating events with such groups as the oriental students, thus getting all students involved in school events.
- Breaking down the social barriers that sometimes form. When projects are assigned, professors make up groups consisting of three students, two Canadian males and a foreign student or female student.
- Having professors talk to students about the necessity of involvement in extra-curricular activities. This is a very important topic when employers are hiring students for jobs.
- Getting those involved in the Engineering Society to recruit at least one other person who is not involved, to come out and have fun.
- Attracting students to the Engineering Society offices. Engineering society types then make personal contact with students. This is an attempt to make the Engineering Society offices less of a formidable and strange place.

It is hoped that all universities benefited from the workshop, and will experience a positive change in student spirit. All it takes is you. See how much fun it can be.

> Chris Harris Mech 8T6

Design Contest Idea Grows

The University of Toronto Engineering Society sent six delegates to the sixteenth of Canadian Congress Engineering Students. At one of the workshops a proposal was made, on the feasability of a design competition between engineering students across the country. After several hours of debate, it was decided that, if organized properly, Canada could have a nation-wide design

competition, organized and run by students in March of 1985.

Ontario Engineering The Design Competition was conceived five years ago to provide undergraduate Ontario's engineering students with an opportunity to acquire practical experience in problem solving and communication. The competition provides an active forum in which students are given the chance to overcome real world problems with sound engineering design The students' ingenuity. designs and papers are to be professionally presented to an audience of judges, selected on their competence engineering, business, and communication.

At the present time, the competition is only open to undergraduate engineering students at an Ontario university. This year's competition, being held at the University of Waterloo March 8-11, 1984, will challenge student's the technical knowledge and problem solving ability in the following four categories:

Entrepreneurial Design

The students are asked to design a marketable product or process not presently available in Canada.

Corporate Design

The students are given an existing problem in Canadian industry and asked to design a solution.

Explanatory Communications

The students are to research and present objectively the important aspects of a technical issue of social significance.

Editorial Communications

The students are asked to develop and present a policy on a socio-technical issue.

The OEDC moves from one host university to another every year, requiring a new chairperson, new directors, and other new student organizors each competition. However, the structure is still exceptionally stable due to the existance of an Advisory Board which does not

have such a turn-over of personnel

This leads us to the Canadian Engineering Design Competition. Since the OEDC has existed in a stable form for five years, and can continue as such indefinitely, the next logical step is a nation-wide, student-governed design competition.

The country can be divided into four geographic regions: Western, Ontario, Quebec and Atlantic, and the WEDC, QEDC, AEDC shall be loosely modelled after the OEDC. The winners of each category in each region will receive a monetary prize plus largely subsidized transportation to the Canadian final (CEDC).

Each regional competition is self-governed, and must raise their own funds. Also, each

regional budget must make a donation to the national competition. That is, the host of the CEDC need not raise any money, but will help co-ordinate the funding campaigns in the four regions.

The first CEDC will take place in 1985 with McMaster as the OEDC host on March 8-11, and Queen's as the CEDC host on March 22-24.

For more information, contact:
Frank Gerencser, '84 OEDC chairman c/o Engineering Society B University of Waterloo Waterloo, Ontario N2L 3G1

(416) 885-1211 ext. 2323

Greg Dow Mech 8T6

Engineering Awards

The Engineering Society's Awards Committee will accept nominations for the following awards:

1. ENGINEERING SOCIETY AWARD

Awarded to a member of the graduating class who has:

- exhibited leadership and character during his/her 4 years
- have served on the Eng. Soc. in any of his/her 4 years
- good academic standing

2. SKULE CANNON AWARD

Awarded to a member of the graduating class who has:

- exhibited leadership and character during his/her 4 years in the Society
- served as an executive member but not an officer of the Society and not a member of the awards committee
- good academic standing

3. ENGINEERING SOCIETY CENTENNIAL AWARD

\$100 awarded to an active member of the first or second year class who passes his year

4. ENGINEERING SOCIETY SEMI-CENTENNIAL AWARD

\$100 awarded to a third year student who has served the society in some manner and who passes his year

Nominations should include a description of why the nominee should be considered for the award (you are welcome to nominate yourself). Letters of nomination should be submitted to the Awards Committee to the attention of Debbie Fletcher, by Friday, February 24.

Engineering Society News:

The Great Week That Was

Godiva Week '84 was a smashing success, as witnessed by the multitudes that showed up to such events as the Resurrection, the Chariot Race, the Boat Races, Godiva's Wake and the Taste-off. Well, o.k., maybe multitude is too strong a word for the Taste-off; perhaps 'small but faithful troup exceeding one-half dozen in number' would be a little more accurate.

Anyway, now for the important stuff. The Boat Races were won by those terrible guys from Team Awesome again. The Jerry P. Potts trophy was won by the Mechanical Chariot, with the Frosh Chariot placing second. Eng Sci came in third and was subsequently disqualified. Nonexistent thanks are extended to the BFC for their magnificently executed non-recovery of the Potts trophy from an amateurish group of trophy-nappers a mere 18 hours before the Chariot situation Race. The definitely tense for a while.

The Baseball Tournament was won by Ind 8T6 with Chem II as runner-up. Thanks go out to Joe, Gary, Bruce, AI, Glyn and Paul for their terrific efforts as umpires for the tournament. You can pick up your seeing eye dogs from Ella any time now. Finally, Frosh C beat everyone to the answer of Godiva's Quest. Their prize: a free smoker.

The highlight of the week was Godiva's Wake, the mega-pub held on Friday, January 13 in Wetmore Hall. The music was great, the beer was better, and the LGMB was best of all. Their renditions of such classics as 'At the Hop' and 'Wipeout' were awe inspiring. At this point I

would like to thank the Bnad for that appearance and several others stragetically placed throughout the course of the week.

Now that I am on the subject of thanks, special thanks go out to Kim Harkness for organizing the Baseball Tournament, Kevin Foody for Godiva's Quest and to the following people whose help was invaluable throughout the week:

Dave Willson Steve Azuma Margaret Seidel Derek Jubb Nick Iozzo . . .

and last but certainly nowhere near least, thanks to everyone who participated and made Godiva Week what it should be: yet another Skule triumph!

> Bill Hollings Blue and Gold Committee

SAC Looks for Leaders

Congratulations to the LGMB and the CSIE for successfully obtaining huge sums of money from SAC's project aid. SAC gave them funds because these two engineering groups are recognized as great assets of the U of T community.

We hope you didn't miss SAC's exciting seminar on esoteric economic theory hosted by Peter Miller as a representative of the Education

Commission. Watch for more SAC special seminars and guest lectures.

Engineering students should start thinking about running for SAC elections. There are 6 engineering directors need for next year. It is a worthwhile and

History Buffs Take

In the hope of generating some interest in the Eng Soc's upcoming centennial, we now present the first of a monthly series of quizzes. You are meant to have fun with them but just to spice things up, we are offering a pair of free passes and four beer tickets to the upcoming Beach Party Pub at the UC Refectory. (The prizes will get better as the questions get tougher.)

To enter print your name and phone number at the top of a page containing your legibly written responses and drop it off in the Centennial Committee mailbox in the Eng Soc Offices (SFB670) by Friday, February 3

at 5:30pm. Winners will be announced at the SUDS Pub that evening and contacted by phone. The answers will be published in the forthcoming issue of the Cannon.

Don't worry, these questions are easy, Good luck!

1. What is the Engineering Society's motto and what is its english translation?

2. What is the Engineering Society's Centennial motto?

3. Name the battleship that lent its name to the second Engineering campus after World War II.

4. Name the first President of the Engineering Society.

5. What was the original name of

Reports, Events and Issues

fun experience!

Marc Seeman Executive SAC Rep

Eng Soc Elections

The Elections for the positions of Engineering Society President, Vice-President: Administration, Vice-President: Activities, Treasurer, Secretary and Engineering Athletic Association President for the 1984-85 term are upcoming. Pertinent dates are:

Nominations Open
Nominations Close
Election Campaign
Elections

Feb. 10
March 2
March 5-7
March 8-9

Second and third year class elections will be held from March 12-16. For more information, forms and rules contact Ella or Andrew at the Engineering Society Office (SFB670).

> Andrew Alberti Chief Returning Officer

SUDS Flow Every Friday

Early Saturday morning an engineering student was arrested for possession and concealment of a dangerous weapon. To my surprise the the weapon in question was in fact three darts! Charges were later

dropped.

It turned that this student was returning from the mixed doubles darts tournament this past Friday held in the Sandford Fleming pub SUDS. I had on opportunity to speak to this girl. She explained that "Every Friday, Bill, Dawn, Dave and I go down to the pub to relax after a hard week of clases. In early September the pub was just an ordinary beer barn. however, they show music videos all evening long and they have installed a couple of darts boards. We have a great time."

I questioned her further and she told me that while she had never played darts before last Friday, her team had managed a second place finish. "After a few beers anyone can play", she told me.

As I understand it, there were twelve teams entered, including a professor and his wife. No doubt it was quite a show for player and spectator alike.

I was so intrigued by the stories she told me I decided to call up the managers of this pub. These two guys, Dave Willson and Peter Watler, have a schedule of events to satisfy everyone. It includes:

- stagggering quantities of beer at great prices
- music videos all evening long
- full length movies (watch for coming attractions)
- darts every week (instruction available)
- euchre nights (dates to be announced)

In a continual effort to out-do themselves, the pub managers have scheduled a Bonanza Dart Tournament for this Friday (February 3). Not only the champs will be winners, there are to prizes for the highest score, the lowest score, the best form and the worst form to mention but a few.

So, . . . if you have an hour or so to play and a thirst to quench come on down. The beer flows at 4 o'clock sharp.

Glyn P. Jones
Roving Reporter and Darts Fan

Noon Concerts Continue

In a continuation of the series initiated in the Fall term, the following bands will perform in the SF Atrium this Spring:

Upper Canada College Feb. 7

King City Collegiate Feb. 8
Etobicoke Collegiate Feb. 1 & 22

Our own Skule Stage Band will play on other dates. Watch for the sigr

Armed Forces Careers

Consider a career with the Armed Forces, one of the few places where there is a shortage of engineers! All years are invited to two seminars to be held at 12 noon and 1 pm on February 23 in SF1105. Representatives of the Canadian Armed Forces will be on hand.

Malcolm McGrath Alumni Liaison to the Dean

Note

the Faculty of Applied Science and Engineering?

6. What was the original purpose of the Toike Olke?

7. What were the names of the prize-winning clean air cars designed and built by engineering students in the early 1970's?

8. What were the names of the Engineering Society publications that evolved into

the Skule Yearbook?

9. What design project has the Engineering Society undertaken to celebrate its centennial? (Describe it.)

10. When is the next meeting of the Centennial Committee? And where will it be held?

President's Message

Ron McKenzie Eng Soc President

January proved to be quite a successful month and February should continue the trend. By now I am sure you have made plans for Reading Week or Thesis Week as it is known to fourth year students. Whether it is 'catching some rays' in the deep south of apres skiing in Quebec, I hope it turns out to be

a memorable getaway.

If you have been reading the Varsity you will have noticed the increased exposure Engineering Society events. Articles which come to mind are procedures for dealing sexual harassment discrimination, underfunding and its effects on our undergraduate education and the abolishing of slave auctions in their present form. As you know, we were the first group on introduce campus to procedure for dealing with problems pertaining to sexual harassment and discrimination. Since their introduction, we have fielded many questions from outside organizations who are trying to implement a similar procedure. One group is trying define clearly sexual harassment and discrimination in order to formulate a campuswide code of procedures for dealing with these issues. We are sending two representatives, Helen Humphrey (Women's Committee) and Paul Shindman (Academic Affairs Committee) to explain procedures and add our experiences and ideas to the development process.

During the full council meeting which took place on January 18, a motion was brought forward and later carried to abolish slave auctions in their present form. Because

of the nature of the event, a great discussion ensued with arguments both for and against being presented. The action of your class representatives was commendable. The majority of the reps had taken a vote in class so that the overall vote justified the opinion of the majority of the students in our faculty. The result confirmed the an increasingly professional attitude in our Faculty. It proves, once again, that we are true campus leaders and mature enough to stand by our decisions. This particular motion was passed under a recorded vote so that each member's vote is available for scrutiny.

At the time this article was written I had not yet met with President Strangway to discuss the underfunding problem which we face in this Faculty. The results of this meeting and the efforts to get some action from Dr. Bette Stephenson will be discussed at the next full council meeting and in the next issue of the Cannon.

The main process which I am involved in at the present time is the review of the incidental fee. As I mentioned in the last issue

of the Cannon, I asked all students to think about how the incidental fee donation has helped the problem of underfunding. То this end, a questionnaire has been prepared and I am asking you to please answer the questions as honestly as possible. The reason for the questionnaire is to compile the overall opinion of all students to help determine the effectiveness of the incidental fee. As most of you know, the incidental fee is reviewed by student representatives from each department along with the first year President, Eng Soc President, the Dean and the department Chairmen. department Chairman presents a statement explaining how and where the money was allocated. Once reviewed, the full Eng Soc Council votes to continue or cancel the fee. I want to make sure that the decision reflects the opinions of all students, so make sure you voice your opinions to your class rep or in the questionnaire.

In the meantime, take advantage of the events planned for this month. It's an excellent chance to release those February blues.

The Professional Development Committee presents

Minister of Industry and Trade

FRANK MILLER

discussing the future of engineering in Ontario

Thursday, February 9 at 12 noon in SF1105

Get a handle on flavour.



Budweiser. Brewed in Ontario by Labatt's.

Engineering Stores

Sales this month:

Parker Rolling Ball Pens — \$2.50

Parker Jotter Pens — \$3.00

Marsgraphic Brush Markers — 75¢

Attention F!rosh:

Last Chance to Buy Your Textbooks

Engineering Hockey Night Friday, Feb. 3 at 7:30 pm

Varsity Blues
vs.
Queen's Golden
Gaels

tickets on sale at the Stores for \$1.50

Engineering Athletics

Carolyn Fraser Women's Aquatics

Hello, sports fans! Contrary to popular opinion, considering the cold weather we are having, there has been a lot of action in the pool in recent days. The men's swim team showed great skill by placing first in the swim meet held January 11 with a total of 75 points, well ahead of the second place finish of 41 points by New College. They had an outstanding performance by Peter Pieper who was chosen their most valuable athlete after placing first in the 100 yard breaststroke and being a member of the their winning crescendo relay team. Congratulations to all the team for a great performance!

Men's waterpolo has begun and is off to a good start. They won both their pre-season games; but in a close match against the Knox squad they lost 7-5 in their first regular season game. They hope to continue the good work into

February.

The women's swim meet, held on January 18, turned out to be a lot of fun for all those who participated. Although the team lost to first place Erindale, they had a great time. Angela Facey (Chem 8T4), showed great skill by placing first in both the 25 yard butterfly and the 25 yard freestyle races as well as winthe Isabel Robertson trophy for the overall individual championship. Congratulations, Angela! Thanks to all who timed and kept score - we couldn't have done without you.

The men's and women's squash seasons have started and the teams hope for success throughout Fabruary

throughout February.

The men's hockey team went to Queen's on Friday, January 13 to compete against other engineering teams from across the province. They played very well and beat most of the teams, however they lost in the finals.

Women's hockey is still alive and doing well. They won their first two games, however lost their third game to Victoria College. Under the eye of their coach Paul, they should be able to regain their winning streak.

Men's volleyball is doing well, with a record of four wins and only two losses. They hope to keep up the good work into February and aim for first place.

Women's volleyball has also met with success so far this season. The competitive team is currently undefeated with two pre-season and one regular season win.

The men's basketball season is progressing well for all three Engineering teams. Our 'A' team

got off to a slow start but with 2 wins in their 3 games in 1984, they should be headed to the playoffs. The 'B' team has had great success and their 8-2 record thus far may foreshadow a championship. The 'C' team has been steadily improving and currently have 4 wins and 6 losses.

It is fast approaching the time of year when athletes yearn for spring and of course the S-Dance. This event is in fact planned for all Engineering students and will be held on Friday, March 23 at the Bond Place Hotel. Though that date seems distant, it is time to start thinking about S-Points. You must submit an S-Point form to be eligible for participation awards. The forms are available in the Eng Soc and must be returned by Friday, February 10.

Engineering Alumni Athlete



Mr. Jim Horn, President of the Engineering Alumni Association, presents Peter Pieper with his award as January's Alumni Athlete of the Month. Peter had an outstanding performance at the Men's Interfaculty Swim Meet, finishing first in two events and was named the overall individual champion. He is also an active member of the Men's Waterpolo team.

mammals (family Dasypodidae) of warm parts of the Americas having body and head encased in an armor [Sp, fr. dim. of armado armed one, fr. L. armatus]: any of several burrowing chiefly nocturnal edentate ar.ma.dil·lo/,är-ma-dil-(,)ō/ n, plarmadillos of small bony plates in which many of them can curl up into a ball when attacked a Synonym for a popular Canadian beer.)